L Number	Hits	Search Text	DB	Time stamp
1	248	microparticles and matrix and protein and sugar and lipid	USPAT; EPO; JPO; DERWENT	2003/05/13 18:22
6	174	microparticles and matrix and albumin and lactose and lipid	USPAT; EPO; JPO; DERWENT	2003/05/13 18:16
11	123	microparticles and matrix and albumin and lactose and phospholipid	USPAT; EPO; JPO; DERWENT	2003/05/13 18:19
21	5	((microparticles and matrix and albumin and lactose and phospholipid) and anesthetic) and bupivacaine	USPAT; EPO; JPO; DERWENT	2003/05/13 18:22
16	27	(microparticles and matrix and albumin and lactose and phospholipid) and anesthetic	USPAT; EPO; JPO; DERWENT	2003/05/13 18:20
26	366	particles and matrix and albumin and lactose and phospholipid	USPAT; EPO; JPO; DERWENT	2003/05/13 18:19
31	35	(particles and matrix and albumin and lactose and phospholipid) and anesthetic	USPAT; EPO; JPO; DERWENT	2003/05/13 18:23
36	6	((particles and matrix and albumin and lactose and phospholipid) and anesthetic) and bupivacaine	USPAT; EPO; JPO; DERWENT	2003/05/13 18:20
41	3151	matrix and protein and sugar and lipid	USPAT; EPO; JPO; DERWENT	2003/05/13 18:22
46	123	matrix and protein and sugar and lipid and anesthetic	USPAT; EPO; JPO; DERWENT	2003/05/13 18:22
51	13	(matrix and protein and sugar and lipid and anesthetic) and bupivacaine	USPAT; EPO; JPO; DERWENT	2003/05/13 18:24
56	675	liposomes and anesthetic	USPAT; EPO; JPO; DERWENT	2003/05/13 18:34
61	89	(liposomes and anesthetic) and bupivacaine	USPAT; EPO; JPO; DERWENT	2003/05/13 18:34
66	50	(liposomes and anesthetic) and bupivacaine and matrix	USPAT; EPO; JPO; DERWENT	2003/05/13 18:24
71	6	((liposomes and anesthetic) and bupivacaine and matrix) and lipid and albumin and lactose	USPAT; EPO; JPO; DERWENT	2003/05/13 18:26
76	11	((liposomes and anesthetic) and bupivacaine and matrix) and lipid and protein and sugar	USPAT; EPO; JPO; DERWENT	2003/05/13 18:29
81	0	chondroine adj sulfate	USPAT; EPO; JPO; DERWENT	2003/05/13 18:29
86	0	chondroine adj sulphate	USPAT; EPO; JPO; DERWENT	2003/05/13 18:29
91	0	chondroine	USPAT; EPO; JPO; DERWENT	2003/05/13 18:29
96	0	glycosamin adj glucan	USPAT; EPO; JPO; DERWENT	2003/05/13 18:30
101	2	glycosamino adj glucan	USPAT; EPO; JPO; DERWENT	2003/05/13 18:30
106	18	glycosaminoglucan	USPAT; EPO; JPO; DERWENT	2003/05/13 18:31
111	0	glycosaminoglucan and liposome	USPAT; EPO; JPO; DERWENT	2003/05/13 18:31

116	0	glycosaminoglucan and microparticle	USPAT; EPO; JPO; DERWENT	2003/05/13 18:31
121	0	glycosaminoglucan and microparticles	USPAT; EPO; JPO; DERWENT	2003/05/13 18:31
126	12	glycosaminoglucan and particles	USPAT; EPO; JPO; DERWENT	2003/05/13 18:33
131	964	hyaluronic and liposomes	USPAT; EPO; JPO; DERWENT	2003/05/13 18:34
136	291	hyaluronic and microparticles	USPAT; EPO; JPO; DERWENT	2003/05/13 18:34
141	121	(hyaluronic and liposomes) and anesthetic	USPAT; EPO; JPO; DERWENT	2003/05/13 18:34
146	45	((hyaluronic and liposomes) and anesthetic) and bupivacaine	USPAT; EPO; JPO; DERWENT	2003/05/13 18:35
151	30	(((hyaluronic and liposomes) and anesthetic) and bupivacaine) and matrix	USPAT; EPO; JPO; DERWENT	2003/05/13 19:22
156	760	pore adj forming and matrix	USPAT; EPO; JPO; DERWENT	2003/05/13 19:23
161	50	pore adj forming adj agent and sugar and matrix	USPAT; EPO; JPO; DERWENT	2003/05/13 19:23
166	37	pore adj forming adj agent and lactose and matrix	USPAT; EPO; JPO; DERWENT	2003/05/13 19:23
171	15	pore adj forming adj agent and lactose and matrix and microparticle	USPAT; EPO; JPO; DERWENT	2003/05/13 19:24
-	2	daniel and kohane	USPAT; EPO; JPO; DERWENT	2003/05/09 15:54
-	144	michael and lipp	USPAT; EPO; JPO; DERWENT	2003/05/09 15:57
-	1484	robert and langer	USPAT; EPO; JPO; DERWENT	2003/05/09 15:57
-	103	robert adj5 langer	USPAT; EPO; JPO; DERWENT	2003/05/09 16:22
-	88	particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug	USPAT; EPO; JPO; DERWENT	2003/05/09 16:26
-	0	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and glycosaminoglycan	USPAT; EPO; JPO; DERWENT	2003/05/09 16:25
-	0	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and glycosamino adj glycan	USPAT; EPO; JPO; DERWENT	2003/05/09 16:24
-	2114	glycosaminoglycan	USPAT; EPO; JPO; DERWENT	2003/05/09 16:25
-	483	glycosaminoglycan and particles	USPAT; EPO; JPO; DERWENT	2003/05/09 16:25
-	72	(glycosaminoglycan and particles) and lipid and sugar and albumin	USPAT; EPO; JPO; DERWENT	2003/05/09 16:25
-	0	(((glycosaminoglycan and particles) and lipid and sugar and albumin) and lactose) and dipalmitoylphosphatidylcholine	USPAT; EPO; JPO; DERWENT	2003/05/09 16:26

-	67	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and diagnostic	USPAT; EPO; JPO; DERWENT	2003/05/09 16:26
-	0	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and ratio adj5 lipid adj5 protein adj5 sugar	USPAT; EPO; JPO; DERWENT	2003/05/09 16:28
-	72	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and diameter	USPAT; EPO; JPO; DERWENT	2003/05/09 16:29
-	1270	1-6 and micrometers	USPAT; EPO; JPO; DERWENT	2003/05/09 16:29
-	14	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and bupivacaine	USPAT; EPO; JPO; DERWENT	2003/05/09 16:30
-	13	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and anesthetic	USPAT; EPO; JPO; DERWENT	2003/05/09 16:33
-	2	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and anticonvulsant	USPAT; EPO; JPO; DERWENT	2003/05/09 16:34
-	9	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and vasodilator	USPAT; EPO; JPO; DERWENT	2003/05/09 16:34
-	5	(((glycosaminoglycan and particles) and lipid and sugar and albumin) and lactose) and phosphatidylcholine	USPAT; EPO; JPO; DERWENT	2003/05/09 16:35
-	52	((glycosaminoglycan and particles) and lipid and sugar and albumin) and lactose	USPAT; EPO; JPO; DERWENT	2003/05/09 16:37
-	25	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and diagnostic adj agent	USPAT; EPO; JPO; DERWENT	2003/05/09 16:39
-	20	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and prophylactic adj agent	USPAT; EPO; JPO; DERWENT	2003/05/09 16:40
-	9	((particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and diameter) and micrometers	USPAT; EPO; JPO; DERWENT	2003/05/09 16:41
-	35	(particles and dipalmitoylphosphatidylcholine and albumin and lactose and drug) and spray adj drying	USPAT; EPO; JPO; DERWENT	2003/05/09 16:59
-	0	microparticles and matrix adj5 ptotein adj5 sugar adj5 lipid	USPAT; EPO; JPO; DERWENT	2003/05/09 17:00
-	0	microparticles and matrix and ptotein and sugar and lipid	USPAT; EPO; JPO; DERWENT	2003/05/13 18:15
-	0	microparticles and matrix adj5 protein adj5 sugar adj5 lipid	USPAT; EPO; JPO; DERWENT	2003/05/09 17:00
-	247	microparticles and matrix and protein and sugar and lipid	USPAT; EPO; JPO; DERWENT	2003/05/09 17:01
-	7	(microparticles and matrix and protein and sugar and lipid) and encapsulated adj5 drug	USPAT; EPO; JPO; DERWENT	2003/05/09 17:01

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1600LXD

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

```
 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Apr 08  "Ask CAS" for self-help around the clock
 NEWS  3  Jun 03  New e-mail delivery for search results now available
 NEWS  4  Aug 08  PHARMAMarketLetter(PHARMAML) - new on STN
 NEWS  5  Aug 19  Aquatic Toxicity Information Retrieval (AQUIRE)
                  now available on STN
 NEWS  6  Aug 26  Sequence searching in REGISTRY enhanced
 NEWS  7  Sep 03  JAPIO has been reloaded and enhanced
 NEWS  8  Sep 16  Experimental properties added to the REGISTRY file
 NEWS  9  Sep 16  CA Section Thesaurus available in CAPLUS and CA
 NEWS 10  Oct 01  CASREACT Enriched with Reactions from 1907 to 1985
 NEWS 11  Oct 24  BEILSTEIN adds new search fields
 NEWS 12  Oct 24  Nutraceuticals International (NUTRACEUT) now available on STN
 NEWS 13  Nov 18  DKILIT has been renamed APOLLIT
 NEWS 14  Nov 25  More calculated properties added to REGISTRY
 NEWS 15  Dec 04  CSA files on STN
 NEWS 16  Dec 17  PCTFULL now covers WP/PCT Applications from 1978 to date
 NEWS 17  Dec 17  TOXCENTER enhanced with additional content
 NEWS 18  Dec 17  Adis Clinical Trials Insight now available on STN
 NEWS 19  Jan 29  Simultaneous left and right truncation added to COMPENDEX,
                  ENERGY, INSPEC
 NEWS 20  Feb 13  CANCERLIT is no longer being updated
 NEWS 21  Feb 24  METADEX enhancements
 NEWS 22  Feb 24  PCTGEN now available on STN
 NEWS 23  Feb 24  TEMA now available on STN
 NEWS 24  Feb 26  NTIS now allows simultaneous left and right truncation
 NEWS 25  Feb 26  PCTFULL now contains images
 NEWS 26  Mar 04  SDI PACKAGE for monthly delivery of multifile SDI results
 NEWS 27  Mar 19  APOLLIT offering free connect time in April 2003
 NEWS 28  Mar 20  EVENTLINE will be removed from STN
 NEWS 29  Mar 24  PATDPAFULL now available on STN
 NEWS 30  Mar 24  Additional information for trade-named substances without
                  structures available in REGISTRY
 NEWS 31  Apr 11  Display formats in DGENE enhanced
 NEWS 32  Apr 14  MEDLINE Reload
 NEWS 33  Apr 17  Polymer searching in REGISTRY enhanced
 NEWS 34  Apr 21  Indexing from 1947 to 1956 being added to records in CA/CAPLUS
 NEWS 35  Apr 21  New current-awareness alert (SDI) frequency in
                  WPIDS/WPINDEX/WPIX
 NEWS 36  Apr 28  RDISCLOSURE now available on STN
 NEWS 37  May 05  Pharmacokinetic information and systematic chemical names
                  added to PHAR

 NEWS EXPRESS  April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
               MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
               AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
```

```
 NEWS LOGIN     Welcome Banner and News Items
 NEWS PHONE     Direct Dial and Telecommunication Network Access to STN
 NEWS WWW       CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *



FILE 'HOME' ENTERED AT 17:26:37 ON 13 MAY 2003

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'CAPLUS' ENTERED AT 17:26:57 ON 13 MAY 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 13 May 2003  VOL 138 ISS 20
FILE LAST UPDATED: 12 May 2003  (20030512/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


=> s particles and lipid and protein and sugar and bupivacaine
        643778 PARTICLES
             1 PARTICLESES
        643778 PARTICLES
                 (PARTICLES OR PARTICLESES)
        223104 LIPID
        181097 LIPIDS
        278176 LIPID
                 (LIPID OR LIPIDS)
       1508080 PROTEIN
       1019140 PROTEINS
       1743431 PROTEIN
                 (PROTEIN OR PROTEINS)
        219304 SUGAR
        117927 SUGARS
        286299 SUGAR
```

(SUGAR OR SUGARS)
2743 BUPIVACAINE
L1 3 PARTICLES AND LIPID AND PROTEIN AND SUGAR AND BUPIVACAINE

=>

=> d 1-3 ibib abs hitrn

L1 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:314746 CAPLUS
DOCUMENT NUMBER: 136:330564
TITLE: **Lipid-protein-sugar** microparticles for drug delivery
INVENTOR(S): Kohane, Daniel S.; Lipp, Michael M.; Langer, Robert S.
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA
SOURCE: PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002032398	A2	20020425	WO 2001-US32378	20011016
WO 2002032398	A3	20030109		
W: CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 2002150621	A1	20021017	US 2001-981020	20011016

PRIORITY APPLN. INFO.: US 2000-240636P P 20001016
AB **Lipid-protein-sugar** microparticles (LPSPs) are provided as a vehicle for drug delivery. Any therapeutic, diagnostic, or prophylactic agent may be encapsulated in a **lipid-protein-sugar** matrix to form microparticles. Preferably the diam. of the LPSP ranges from 50 to 10 .mu.m. The **particles** may be prepd. by using any known **lipid** (e.g., DPPC), **protein** (e.g., albumin), or **sugar** (e.g., lactose). Methods of prepg. and administering the **particles** are also provided. Methods of providing a nerve block are also provided by administering LPSPs with a local anesthetic (e.g., **bupivacaine**) within the vicinity of a nerve. Title microparticles (DPPC-albumin-lactose) were prepd. contg. **bupivacaine**. The drug release from the **particles** was complete within 24 h.

L1 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:32078 CAPLUS
DOCUMENT NUMBER: 137:174753
TITLE: Biocompatibility of **lipid-protein-sugar particles** containing **bupivacaine** in the epineurium
AUTHOR(S): Kohane, Daniel S.; Lipp, Michael; Kinney, Ramsey C.; Anthony, Douglas C.; Louis, David N.; Lotan, Noah; Langer, Robert
CORPORATE SOURCE: Department of Pediatrics, Massachusetts General Hospital and Harvard Medical School, Boston, MA, 02114, USA
SOURCE: Journal of Biomedical Materials Research (2002), 59(3), 450-459
CODEN: JBMRBG; ISSN: 0021-9304
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Novel **lipid-protein-sugar particles**

(LPSPs) are potentially biocompatible because they are composed of naturally occurring ingredients and their expected tissue dwell times are relatively short. In this research, the authors used histol. sections to study tissue reaction to LPSPs (4.4-.mu.m median diam.) when used for sciatic nerve block in the rat. As a ref., the authors compared LPSPs to 60-.mu.m median diam. poly(lactic-co-glycolic) acid (PLGA) microspheres (110,000 MW PLGA, glycolic/lactic ratio 65:35). Four days after injection, both particle types produced acute inflammation within the confines of the injectate, inflammation in adjacent tissues, and myotoxicity. **Bupivacaine**-free **particles** did not display myotoxicity, and inflammation in adjacent tissues was reduced. At 2 wk, inflammation from LPSPs had almost disappeared, whereas PLGA microspheres had a foreign-body giant cell reaction until at least 8 wk after injection. In contrast, 3.6-.mu.m median diam., 20,000-MW PLGA microspheres produced a primarily histiocytic reaction 2 wk after injection. In summary, the LPSPs and PLGA microspheres studied herein have excellent biocompatibility, but tissue reaction to the former is of much shorter duration. Myotoxicity and inflammation of surrounding tissue is largely attributed to **bupivacaine**. Foreign-body giant cells may be attributed to particle size rather than a specific reaction to PLGA.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:2220 CAPLUS
DOCUMENT NUMBER: 134:212565
TITLE: Sciatic nerve blockade with **lipid-protein-sugar particles** containing **bupivacaine**
AUTHOR(S): Kohane, Daniel S.; Lipp, Michael; Kinney, Ramsey C.; Lotan, Noah; Langer, Robert
CORPORATE SOURCE: Department of Pediatrics, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA
SOURCE: Pharmaceutical Research (2000), 17(10), 1243-1249
CODEN: PHREEB; ISSN: 0724-8741
PUBLISHER: Kluwer Academic/Plenum Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The efficacy of **lipid-protein-sugar particles** (LPSPs) in providing prolonged duration local anesthesia by percutaneous injection was assessed. Ten % (wt./wt.) **bupivacaine** LPSPs (60% dipalmitoylphosphatidylcholine) were 4.4 .+-. 0.39 .mu.m in diam., with a tap d. of 0.11 .+-. 0.04 g/mL. These LPSPs and 50% (wt./wt.) PLGA microspheres had comparable durations of sensory blockade (468 .+-. 210 min vs. 706 .+-. 344 min, p = 0.08), although the LPSPs produced a much lesser duration of motor blockade (508 .+-. 258 min vs. 1062 .+-. 456 min, p = 0.005). Systemic toxicity was minimal in both groups. LPSPs provide sensory blockade durations comparable to those from PLGA microspheres, with a smaller amt. of drug loading. Motor blockade is shorter with LPSPs than with PLGA microspheres. LPSPs appear to be suitable for extended nerve blockade. Given their size and low d., they may be useful for topical anesthesia of the airway.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	17.94	18.15

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL

```
                                                        ENTRY     SESSION
CA SUBSCRIBER PRICE                                     -1.95       -1.95

FILE 'STNGUIDE' ENTERED AT 17:29:52 ON 13 MAY 2003
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: May  9, 2003 (20030509/UP).

=> s particles and lipid and protein and sugar and encapsulated
             8 PARTICLES
             0 LIPID
             7 PROTEIN
             1 SUGAR
             1 SUGARS
             1 SUGAR
                 (SUGAR OR SUGARS)
             0 ENCAPSULATED
L2           0 PARTICLES AND LIPID AND PROTEIN AND SUGAR AND ENCAPSULATED

=> s particles and lipid and sugar and protein
             8 PARTICLES
             0 LIPID
             1 SUGAR
             1 SUGARS
             1 SUGAR
                 (SUGAR OR SUGARS)
             7 PROTEIN
L3           0 PARTICLES AND LIPID AND SUGAR AND PROTEIN

=> file caplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   0.18      18.33

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                     ENTRY    SESSION
CA SUBSCRIBER PRICE                                   0.00      -1.95

FILE 'CAPLUS' ENTERED AT 17:31:33 ON 13 MAY 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 13 May 2003  VOL 138 ISS 20
FILE LAST UPDATED: 12 May 2003  (20030512/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.
```

```
=> s particles and lipid and sugar and protein
        643778 PARTICLES
             1 PARTICLESES
        643778 PARTICLES
                 (PARTICLES OR PARTICLESES)
        223104 LIPID
        181097 LIPIDS
        278176 LIPID
                 (LIPID OR LIPIDS)
        219304 SUGAR
        117927 SUGARS
        286299 SUGAR
                 (SUGAR OR SUGARS)
       1508080 PROTEIN
       1019140 PROTEINS
       1743431 PROTEIN
                 (PROTEIN OR PROTEINS)
L4         110 PARTICLES AND LIPID AND SUGAR AND PROTEIN

=> s L4 and encapsulated
         26260 ENCAPSULATED
L5           5 L4 AND ENCAPSULATED

=> dL5 1-5 ibib abs hitrn
DL5 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> d L5 1-5 ibib abs hitrn

L5   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:        2002:973822  CAPLUS
TITLE:                   Effectiveness of muscimol-containing microparticles
                         against pilocarpine-induced focal seizures
AUTHOR(S):               Kohane, Daniel S.; Holmes, Gregory L.; Chau, Ying;
                         Zurakowski, David; Langer, Robert; Cha, Byung Ho
CORPORATE SOURCE:        Pediatric Intensive Care Unit, MassGeneral Hospital
                         for Children, Children's Hospital Harvard Medical
                         School, Boston, MA, USA
SOURCE:                  Epilepsia (2002), 43(12), 1462-1468
                         CODEN: EPILAK; ISSN: 0013-9580
PUBLISHER:               Blackwell Publishing, Inc.
DOCUMENT TYPE:           Journal
LANGUAGE:                English
AB   Purpose: To investigate the efficacy of in situ lipid-
     protein-sugar particles (LPSPs) in mitigating
     the epileptogenic and histol. effects of intrahippocampal pilocarpine in
     rats.  Methods: LPSPs with and without muscimol were produced by
     spray-drying, sized by Coulter counter, and muscimol content detd. by
     high-pressure liq. chromatog. (HLPC).  Particles, free muscimol
     or saline, were injected into the hippocampi of Sprague-Dawley rats before
     40 mM pilocarpine, and seizure activity was scored.  The trajectories of
     behavioral scores between groups were compared with two-way repeated
     measures anal. of variance.  Animals were killed after 2 wk.  Brain
     sections were stained (Timm and thionin) and scored.  Results: LPSPs were
     4 to 5 .mu.m in diam., and contained 0 or 2% (wt/wt) muscimol.  In vitro,
     muscimol was released over a 5-day period.  Intrahippocampal injections of
     normal saline and blank LPSPs did not deter seizure activity from
     pilocarpine.  The rise of the trajectory in behavior scores in animals
     given LPSPs contg. 5 .mu.g muscimol was significantly slower than in those
     receiving saline, blank particles, or 5 .mu.g of unencapsulated
     muscimol.  There was less apparent neuronal injury and CA3 and
     supragranular mossy fiber sprouting in hippocampi of animals receiving
```

muscimol-contg. **particles** than in animals that did not receive muscimol. Hippocampi of animals that received 5 .mu.g of **encapsulated** muscimol showed less supragranular sprouting than did those receiving 5 .mu.g of unencapsulated muscimol, but showed no difference in cell loss or CA3 sprouting. Conclusions: Focally delivered biodegradable microparticles loaded with muscimol are effective in reducing seizure activity from pilocarpine in animals and mitigate the histol. effects.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:314746 CAPLUS
DOCUMENT NUMBER: 136:330564
TITLE: **Lipid-protein-sugar** microparticles for drug delivery
INVENTOR(S): Kohane, Daniel S.; Lipp, Michael M.; Langer, Robert S.
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA
SOURCE: PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002032398	A2	20020425	WO 2001-US32378	20011016
WO 2002032398	A3	20030109		
W: CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 2002150621	A1	20021017	US 2001-981020	20011016

PRIORITY APPLN. INFO.: US 2000-240636P P 20001016

AB **Lipid-protein-sugar** microparticles (LPSPs) are provided as a vehicle for drug delivery. Any therapeutic, diagnostic, or prophylactic agent may be **encapsulated** in a **lipid-protein-sugar** matrix to form microparticles. Preferably the diam. of the LPSP ranges from 50 to 10 .mu.m. The **particles** may be prepd. by using any known **lipid** (e.g., DPPC), **protein** (e.g., albumin), or **sugar** (e.g., lactose). Methods of prepg. and administering the **particles** are also provided. Methods of providing a nerve block are also provided by administering LPSPs with a local anesthetic (e.g., bupivacaine) within the vicinity of a nerve. Title microparticles (DPPC-albumin-lactose) were prepd. contg. bupivacaine. The drug release from the **particles** was complete within 24 h.

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:314744 CAPLUS
DOCUMENT NUMBER: 136:330527
TITLE: **Lipid-protein-sugar particles** for delivery of nucleic acids
INVENTOR(S): Kohane, Daniel S.; Anderson, Daniel G.; Langer, Robert S.
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2002032396	A2	20020425	WO 2001-US32210	20011016
WO 2002032396	A3	20030206		
W: CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 2002150626	A1	20021017	US 2001-981460	20011016

PRIORITY APPLN. INFO.: US 2000-240698P P 20001016

AB **Lipid-protein-sugar particles** (LPSPs) are provided as a vehicle for the delivery of nucleic acids. Any polynucleotide (e.g., DNA, RNA) may be **encapsulated** in a **lipid-protein-sugar** matrix to form microparticles. Preferably the diam. of the LPSP ranges from 50 nm to 10 .mu.m. The **particles** may be prepd. using any known **lipid** (e.g., DPPC), **protein** (e.g., albumin), or **sugar** (e.g., lactose). Methods of prepg. the **particles** and administering the **particles** for gene therapy are also provided. Preferably the methods of prepg. the LPSPs do not significantly damage the polynucleotide to be delivered.

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:622166 CAPLUS
DOCUMENT NUMBER: 131:254402
TITLE: Site-specific binding system, imaging compositions and methods
INVENTOR(S): Lanza, Gregory M.; Wickline, Samuel A.
PATENT ASSIGNEE(S): Barnes-Jewish Hospital, USA
SOURCE: U.S., 37 pp., Cont.-in-part of U.S. 5,780,010.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5958371	A	19990928	US 1997-989979	19971212
US 5690907	A	19971125	US 1995-488743	19950608
CA 2222544	AA	19961227	CA 1996-2222544	19960606
US 5989520	A	19991123	US 1998-26216	19980219
WO 2000071172	A1	20001130	WO 1999-US11491	19990525
W: AU, BR, CA, JP, NO				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9940975	A1	20001212	AU 1999-40975	19990525
EP 1251877	A1	20021030	EP 1999-924489	19990525
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				

PRIORITY APPLN. INFO.: US 1995-488743 A2 19950608
US 1996-647277 A2 19960523
WO 1999-US11491 A 19990525

AB A method for ligand-based binding of **lipid encapsulated particles** to mol. epitopes on a surface in vivo or in vitro comprises sequentially administering (a) a site-specific ligand activated with a biotin activating agent; (b) an avidin activating agent; and (c) **lipid-encapsulated particles** activated with a biotin activating agent, whereby the ligand is conjugated to the **particles** through an avidin-biotin interaction and the resulting conjugate is bound to the mol. epitopes on such surface. The conjugate is effective for imaging by x-ray, ultrasound, magnetic resonance, positron emission tomog., or nuclear imaging. Compns. for use in ultrasonic imaging of natural or synthetic surfaces and for enhancing the acoustic reflectivity thereof are also disclosed.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:401728 CAPLUS
DOCUMENT NUMBER: 125:67764
TITLE: Targeted delivery via biodegradable polymers
INVENTOR(S): Roth, Laurence A.; Herman, Stephen Jack
PATENT ASSIGNEE(S): Focal, Inc., USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9611671	A1	19960425	WO 1995-US14103	19951011
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2202511	AA	19960425	CA 1995-2202511	19951011
AU 9539720	A1	19960506	AU 1995-39720	19951011
AU 700903	B2	19990114		
EP 785774	A1	19970730	EP 1995-937688	19951011
EP 785774	B1	20010131		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10509696	T2	19980922	JP 1995-513488	19951011
EP 1004293	A2	20000531	EP 1999-202631	19951011
EP 1004293	A3	20011004		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
AT 198979	E	20010215	AT 1995-937688	19951011
ES 2155534	T3	20010516	ES 1995-937688	19951011
US 5879713	A	19990309	US 1997-787647	19970123
AU 9923614	A1	19990527	AU 1999-23614	19990401
AU 726472	B2	20001109		

PRIORITY APPLN. INFO.:			
US 1994-322092	A	19941012	
AU 1995-39720	A3	19951011	
EP 1995-937688	A3	19951011	
WO 1995-US14103	W	19951011	

AB Delivery of bioactive mols. such as nucleic acid mols. encoding a **protein** can be enhanced by immobilization of the bioactive mol. in a polymeric material adjacent to the cells where delivery is desired, where the bioactive mol. is **encapsulated** in a vehicle such as liposomes which facilitates transfer of the bioactive mols. into the targeted tissue. Targeting of the bioactive mols. can also be achieved by selection of an encapsulating medium of an appropriate size whereby the medium serves to deliver the mols. to a particular target. For example, encapsulation of nucleic acid mols. or biol. active **proteins** within biodegradable, biocompatible polymeric microparticles which are appropriately sized to infiltrate, but remain trapped within, the capillary beds and alveoli of the lungs can be used for targeted delivery to these regions following administration to a patient by infusion or injection. Thus, expression vector pRSVLUC, contg. firefly luciferase cDNA, was dissolved in a 10% soln. of gelling prepolymer having a PEG core with .apprx.5 lactate residues at each end, capped by acrylate groups. This soln., which also contained eosin Y as photoinitiator, was incorporated into pos. charged liposomes contg. the cationic **lipid** analog, 1,2-dioleoyloxy-3-(trimethylammonium)propane. The liposomes were introduced into the rat carotid artery in vivo and gelated by illumination with green light. After 3 days, gene expression was detected in the artery.

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	21.94	40.27

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.26	-5.21

FILE 'STNGUIDE' ENTERED AT 17:33:17 ON 13 MAY 2003

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: May 9, 2003 (20030509/UP).